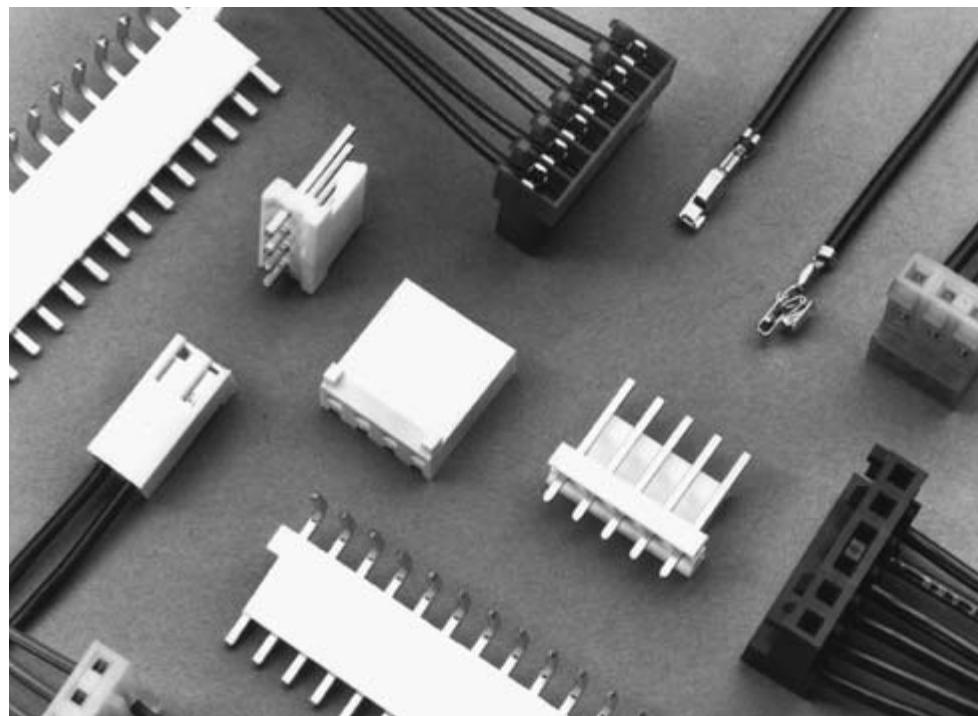


Product Facts

- Connectors and headers for 2 through 24 positions; wire sizes of 18, 20, 22, 24 and 26 AWG [0.9–0.12 mm²]
- Connectors and headers, except shrouded headers, are end-to-end stackable
- Quad Connectors for higher current rating (page 54)
- Posted connectors for 2, 3, 4, 6, 9, 12, 15 and 24 positions
- Card edge connectors for 3, 6, 9, 12, 15, 18 and 20 through 24 positions
- Connectors preloaded with IDC contacts
- All contacts are slotted for insulation displacement (IDC) termination technique
- Connector styles include both closed end and feed-thru, with and without locking ramps and polarizing tabs
- Molded ribs on housing do not allow reverse mating
- Contacts are lubricated for fretting corrosion protection
- Benefits derived from the MTA-156 system include increases quality and ease of handling such as—
 - One-step assembly
 - No wire stripping
 - No contact damage
 - Reduced wiring errors
 - Simpler tooling
 - Simple maintenance and repair
- Meets the material requirements of Table 23.1 of UL 1410 Standards for Television Receiver and Video Products (wire-to-post connectors only)
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR7189

MTA, CST-100 II, SL-156 and AMP Economy Power (EP) Connectors

AMP

.156 [3.96] Centerline MTA-156 IDC Connectors and HeadersMTA-156
.156 [3.96]

MTA-156 connectors accept discrete and ribbon cable wire sizes ranging from 18–26 AWG [0.9–0.12 mm²] with maximum insulation outside diameter .095 [2.41] for single wire and .070 [1.78] for mass termination of wires. Tin plated solid, fused stranded or stranded (7, 16, and 19 strands) wire with PVC insulation can be used on 18 AWG [0.8–0.9 mm²] MTA-156 connectors; 7, 10, and 19 stranded wire on 20 AWG [0.5–0.6 mm²] MTA-156 connectors; and 7 and 19 stranded wire on 22–26 AWG [0.4–0.12 mm²] MTA-156 connectors.

Only one wire to be terminated into an IDC contact slot.

Mass termination of wire provides the lowest applied cost because it drastically reduces the labor content of virtually any cable or harness assembly required.

The wire-to-post connector housing material is flame retardant thermoplastic, either UL94V-2 or UL94V-0 rated.

A full line of .156 [3.96] centerline headers completes the system. Headers are available with straight or right-angle posts, in flat friction lock and shrouded styles. Headers are available in 2 through 24 positions.

Performance Data***Voltage Rating**—600 vac**Current Rating**—

7 amp max. for MTA-156 Connector

Low-Level Resistance—

3.0 mΩ max. initial

Dielectric Withstanding Voltage—
2200 vac/1 min.**Insulation Resistance**—

5000 MΩ min. initial

Operating Temperature—

−55° C to +105° C

*Refer to the Product Specification for additional electrical, mechanical and environmental performance tests and requirements.

Technical Documents**Product Specification**

108-1051 MTA-156 Connectors

Application Specifications114-1020 MTA-156 Connectors,
Posted Connectors and
Card Edge Connectors114-1032 MTA-156 Ribbon Cable
Assembly

Note: Refer to page 70 for approved wire listings.

Electronics

**MTA-156 Connector/
Header Mateability
Guide****Matrix for Tin Plated
Part Numbers**

This matrix has been prepared to assist you, our customer, in defining the correct mating halves for the MTA-156 header and connector combination. Where a "Y" is indicated the combination is a valid mating pair. Where an "N" is indicated the combination is not acceptable for mating.

MTA-156
.156 [3.96]

Headers	640383	640384	640385	640387	640388	640389	640445	644611	644612	644613	644614	644615	644616	644617	644749	644750	644751	644752	644753	644754	644755	6447123	647124	647125	647126	647127	647128	647129	647130	647210	647211	647212	647227	647228	647230	647646	647648	174017
Connectors																																						
640426	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640427	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640428	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640429	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640430	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640431	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640432	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640433	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640434	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640435	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640472	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640473	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640474	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640475	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640476	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640477	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640478	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640479	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640480	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640481	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640495	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640599	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640600	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640601	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640602	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640604	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640605	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640606	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640607	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
640608	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
641301	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
641302	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
641303	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
641304	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
641305	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
641306	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
641307	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
641308	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
641309	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
641310	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
643817	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
643818	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
643819	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
643820	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
643821	Y	Y	Y	N	Y	Y	Y	Y	Y																													

MTA-156 Connector/Header Mateability Guide (Continued)

This matrix has been prepared to assist you, our customer, in defining the correct mating halves for the MTA-156 header and connector combination. Where a "Y" is indicated the combination is a valid mating pair. Where an "N" is indicated the combination is not acceptable for mating.

Matrix for .000030 [0.00076] Gold Plated Part Numbers

Connectors	Headers																									
	641202	641203	641204	641207	641208	641209	641210	644627	644628	644629	644630	644631	644632	644633	644756	644757	644758	644759	644760	644761	644762	647131	647132	647133	647134	647135
641217	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	
641218	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	
641219	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	
641220	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	
641221	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	
641222	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	
641223	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	
641224	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	
641225	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	
641226	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	
641227	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	
641228	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	
641229	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	
641230	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	
641231	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	
641232	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	
641233	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	
641234	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	
641235	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	
641236	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	
644460	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	
644662	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	
644663	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	
644687	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	
644718	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	
644720	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	

Matrix for .000015 [0.00038] Gold Plated Part Numbers

Material and Finish

Housing—UL94V-2 rated, nylon, see below for color; or UL94V-0 rated, nylon, black

Contacts—Phosphor bronze, post tin plated, .000030 [0.00076] or .000015 [.00038] post gold plated over nickel

Color Coding by Wire Size for UL94V-2 Connectors

26 AWG—Blue

24 AWG—White

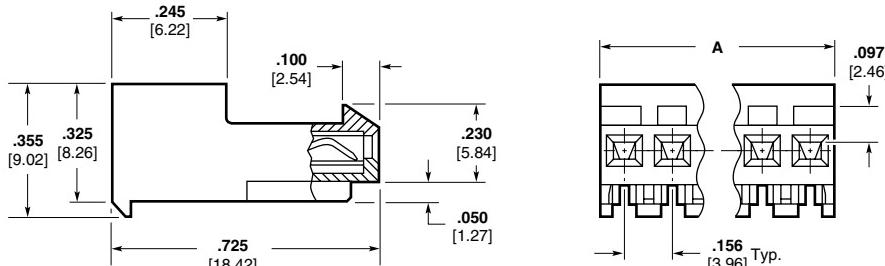
22 AWG—Red

20 AWG—Yellow

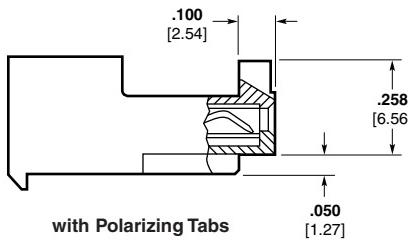
18 AWG—Orange

All Wire Sizes in UL94V-0—
Black**Notes:**

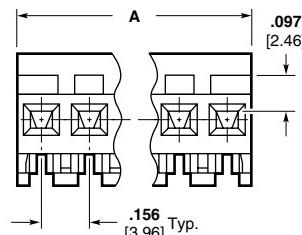
1. Only connectors with locking ramp and without polarizing tabs mate with posted connectors on page 45.
2. Refer to pages 70 thru 74 for approved wire listing.
3. For strain reliefs and dust covers, see pages 40 and 41.
4. For keying plugs and panel mount end caps, see page 42.
5. Other circuit sizes are available upon request. Minimums may apply.
6. Connector circuits can be molded closed for keying purposes. Minimums may apply.
7. Where no part numbers appear in the chart, parts can be made available upon request. Minimums may apply.
8. To determine connector overall length (Dim. A), multiply .156 x the number of circuits. Example: .156 x 10 circuits equals 1.560 inches [39.62 mm].

MTA-156 IDC Connectors—Closed End**Closed End with Locking Ramp**

without Polarizing Tabs

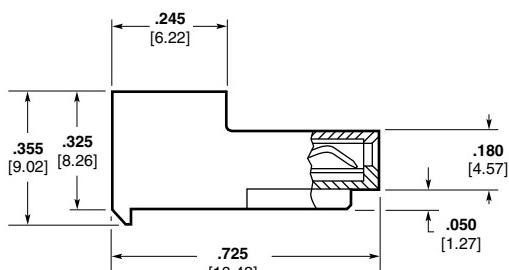


with Polarizing Tabs

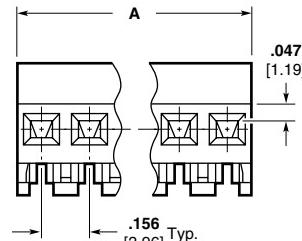
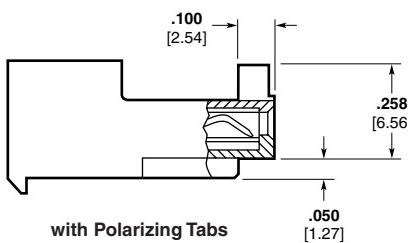


For mateability options, see matrix on pages 34 and 35.

Mating half visuals for Closed End Connectors with Locking Ramp, see pages 45 thru 48, 50, 52, and 53, (49 and 51 Front Bend Headers Only).

Closed End without Locking Ramp

without Polarizing Tabs



with Polarizing Tabs

For mateability options, see matrix on pages 34 and 35.

Mating half visuals for Closed End Connectors without Locking Ramp, see pages 46 thru 53.

Connector Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and number of circuits available for the described connectors.

Prefixes and suffixes are determined by the number of circuit positions in the connector. For example, the complete part number for a 10-position closed end connector with locking ramp and without polarizing tabs for 18 AWG wire would be:

Base number **640426** plus prefix-and-suffix

1- — -0

The correct ordering number is

1-640426-0

The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	640426-2	3-640426-2
3	640426-3	3-640426-3
4	640426-4	3-640426-4
5	640426-5	3-640426-5
6	640426-6	3-640426-6
7	640426-7	3-640426-7
8	640426-8	3-640426-8
9	640426-9	3-640426-9
10	1-640426-0	4-640426-0
11	1-640426-1	4-640426-1
12	1-640426-2	4-640426-2
13	1-640426-3	4-640426-3
14	1-640426-4	4-640426-4
15	1-640426-5	4-640426-5
16	1-640426-6	4-640426-6
17	1-640426-7	4-640426-7
18	1-640426-8	4-640426-8
19	1-640426-9	4-640426-9
20	2-640426-0	5-640426-0
21	2-640426-1	5-640426-1
22	2-640426-2	5-640426-2
23	2-640426-3	5-640426-3
24	2-640426-4	5-640426-4

Note: All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

MTA-156 IDC Connectors—Closed End (Continued)

Base Part Numbers

Connector Type & Wire Size	Closed End with Locking Ramp				Closed End without Locking Ramp			
	Without Tabs		With Tabs		Without Tabs		With Tabs	
	Connector Part Nos.	No. of Circuits/ RoHS Equiv.	Connector Part Nos.	No. of Circuits/ RoHS Equiv.	Connector Part Nos.	No. of Circuits/ RoHS Equiv.	Connector Part Nos.	No. of Circuits/ RoHS Equiv.
Standard UL94V-2, Tin Plated								
18 AWG 0.8–0.9 mm ²	640426 32-54	2-24 32-54	643817 32-54	2-24 32-54	640431 32-54	2-24 32-54	644461 ¹ 32-44	2-14 32-44
20 AWG 0.5–0.6 mm ²	640427 32-54	2-24 32-54	643818 32-54	2-24 32-54	640432 32-54	2-24 32-54	644462 ¹ 32-44	2-14 32-44
22 AWG 0.3–0.4 mm ²	640428 32-54	2-24 32-54	643819 32-54	2-24 32-54	640433 32-54	2-24 32-54	644463 ¹ 32-44	2-14 32-44
24 AWG 0.2 mm ²	640429 32-54	2-24 32-54	643820 32-54	2-24 32-54	640434 32-54	2-24 32-54	644464 ¹ 32-44	2-14 32-44
26 AWG 0.12–0.15 mm ²	640430 32-54	2-24 32-54	643821 32-54	2-24 32-54	640435 32-54	2-24 32-54	—	—
Tape Mounted on Reel UL94V-2, Tin Plated								
18 AWG 0.8–0.9 mm ²	640472 32-54	2-24 32-54	644878 32-54	2-24 32-54	640477 32-54	2-24 32-54	—	—
20 AWG 0.5–0.6 mm ²	640473 32-54	2-24 32-54	—	—	640478 32-54	2-24 32-54	—	—
22 AWG 0.3–0.4 mm ²	640474 32-54	2-24 32-54	644783 32-54	2-24 32-54	640479 32-54	2-24 32-54	644791 ¹ 32-44	2-14 32-44
24 AWG 0.2 mm ²	640475 32-54	2-24 32-54	—	—	640480 32-54	2-24 32-54	—	—
26 AWG 0.12–0.15 mm ²	640476 32-54	2-24 32-54	—	—	640481 32-54	2-24 32-54	—	—
Standard UL94V-2, .000030 [0.00076] Gold Plated								
18 AWG 0.8–0.9 mm ²	641217 32-54	2-24 32-42	644460 ¹ 32-42	2-12 32-42	641222 32-54	2-24 32-54	—	—
20 AWG 0.5–0.6 mm ²	641218 32-54	2-24 32-42	644663 ¹ 32-42	2-12 32-42	641223 32-54	2-24 32-54	—	—
22 AWG 0.3–0.4 mm ²	641219 32-54	2-24 32-42	644662 ¹ 32-42	2-12 32-42	641224 32-54	2-24 32-54	644687 ¹ 32-44	2-14 32-44
24 AWG 0.2 mm ²	641220 32-54	2-24 32-54	—	—	641225 32-54	2-24 32-54	—	—
26 AWG 0.12–0.15 mm ²	641221 32-54	2-24 32-54	—	—	641226 32-54	2-24 32-54	—	—
Standard UL94V-2, .000015 [0.00038] Gold Plated								
18 AWG 0.8–0.9 mm ²	641148 32-54	2-24 32-42	644284 ¹ 32-42	2-12 32-42	641153 32-54	2-24 32-54	—	—
20 AWG 0.5–0.6 mm ²	641149 32-54	2-24 32-54	—	—	641154 32-54	2-24 32-54	—	—
22 AWG 0.3–0.4 mm ²	641150 32-54	2-24 32-54	647478 ¹ 32-42	2-12 32-42	641155 32-54	2-24 32-54	—	—
24 AWG 0.2 mm ²	641151 32-54	2-24 32-54	—	—	641156 32-54	2-24 32-54	—	—
26 AWG 0.12–0.15 mm ²	641152 32-54	2-24 32-54	—	—	641157 32-54	2-24 32-54	—	—
Standard UL94V-0, Tin Plated (Black in color)								
18 AWG 0.8–0.9 mm ²	644860 ¹ 32-42	2-12 32-42	—	—	644502 ¹ 32-42	2-12 32-42	644082 ¹ 32-42	2-12 32-42
22 AWG 0.3–0.4 mm ²	—	—	—	—	644501 ¹ 32-42	2-12 32-42	644566 ¹ 32-42	2-12 32-42

¹ Other circuit sizes are available upon request. Minimums may apply.

Note: Blocked circuit configurations are available upon request. Contact product engineer or product manager for details. Minimums may apply.

Material and Finish

Housing—UL94V-2 rated, nylon, see below for color; or UL94V-0 rated, nylon, black

Contacts—Phosphor bronze; post tin plated, .000030 [.00076] or .000015 [.00038] post gold plated over nickel

Color Coding by Wire Size for UL94V-2 Connectors

26 AWG—Blue

24 AWG—White

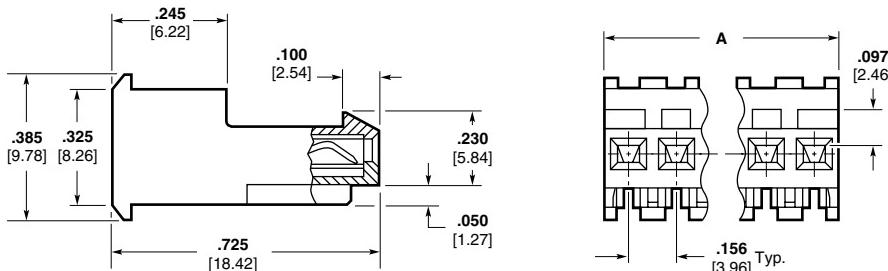
22 AWG—Red

20 AWG—Yellow

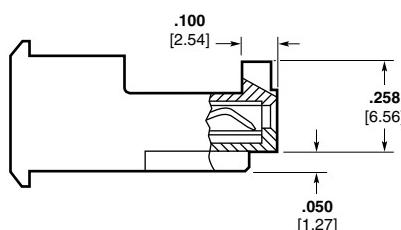
18 AWG—Orange

All Wire Sizes in UL94V-0—
Black**Notes:**

1. Only connectors with locking ramp and without polarizing tabs mate with posted connectors on page 45.
2. Refer to pages 70 thru 74 for approved wire listing.
3. For strain reliefs and dust covers, see pages 40 and 41.
4. For keying plugs and panel mount end caps, see page 42.
5. Other circuit sizes are available upon request. Minimums may apply.
6. Connector circuits can be molded closed for keying purposes. Minimums may apply.
7. Where no part numbers appear in the chart, parts can be made available upon request. Minimums may apply.
8. To determine connector overall length (Dim. A), multiply .156 x the number of circuits. Example: .156 x 10 circuits equals 1.560 inches [39.62 mm].

 MTA-156
.156 [3.96]
MTA-156 IDC Connectors—Feed-Thru**Feed-Thru with Locking Ramp**

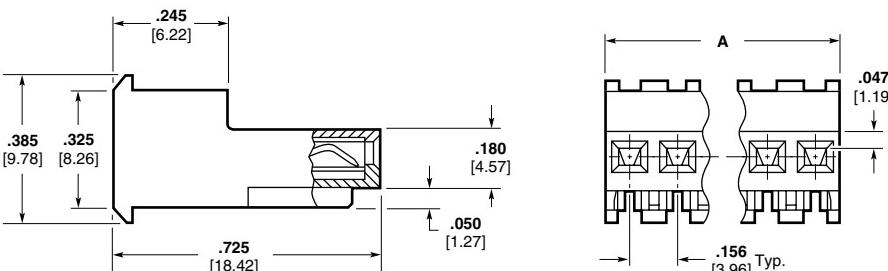
without Polarizing Tabs



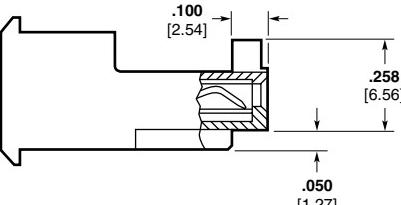
with Polarizing Tabs

For mateability options, see matrix on pages 34 and 35.

Mating half visuals for Feed-Thru Connectors with Locking Ramp, see pages 45 thru 48, 50, 52, and 53, (49 and 51 Front Bend Headers Only).

Feed-Thru without Locking Ramp

without Polarizing Tabs



with Polarizing Tabs

For mateability options, see matrix on pages 34 and 35.

Mating half visuals for Feed-Thru Connectors without Locking Ramp, see pages 46 thru 53.

Electronics

Connector Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and number of circuits available for the described connectors.

Prefixes and suffixes are determined by the number of circuit positions in the connector. For example, the complete part number for a 10-position feed-thru connector with locking ramp and without polarizing tabs for 18 AWG wire would be:

Base number **640599** plus prefix-and-suffix

1- — 0

The correct ordering number is

1-640599-0

The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	640599-2	3-640599-2
3	640599-3	3-640599-3
4	640599-4	3-640599-4
5	640599-5	3-640599-5
6	640599-6	3-640599-6
7	640599-7	3-640599-7
8	640599-8	3-640599-8
9	640599-9	3-640599-9
10	1-640599-0	4-640599-0
11	1-640599-1	4-640599-1
12	1-640599-2	4-640599-2
13	1-640599-3	4-640599-3
14	1-640599-4	4-640599-4
15	1-640599-5	4-640599-5
16	1-640599-6	4-640599-6
17	1-640599-7	4-640599-7
18	1-640599-8	4-640599-8
19	1-640599-9	4-640599-9
20	2-640599-0	5-640599-0
21	2-640599-1	5-640599-1
22	2-640599-2	5-640599-2
23	2-640599-3	5-640599-3
24	2-640599-4	5-640599-4

Note: All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

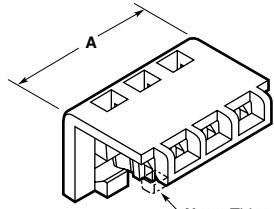
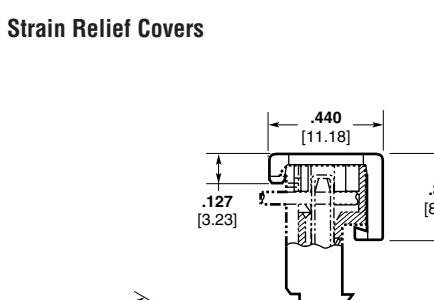
MTA-156 IDC Connectors—Feed-Thru (Continued)

Base Part Numbers

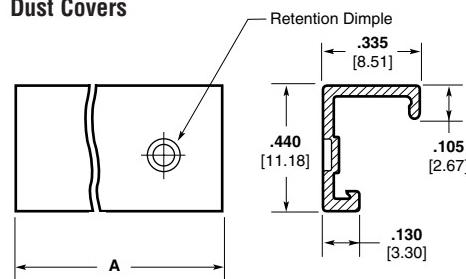
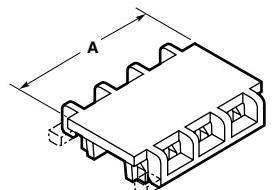
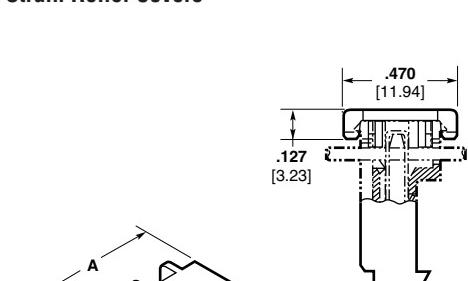
Connector Type & Wire Size	Feed-Thru with Locking Ramp				Feed-Thru without Locking Ramp			
	Without Tabs		With Tabs		Without Tabs		With Tabs	
	Connector Part Nos.	No. of Circuits/RoHS Equiv.	Connector Part Nos.	No. of Circuits/RoHS Equiv.	Connector Part Nos.	No. of Circuits/RoHS Equiv.	Connector Part Nos.	No. of Circuits/RoHS Equiv.
Standard UL94V-2, Tin Plated								
18 AWG 0.8–0.9 mm ²	640599	2–24 32–54	644465 ¹	2–14 32–44	640604	2–24 32–54	644469 ¹	2–14 32–44
20 AWG 0.5–0.6 mm ²	640600	2–24 32–54	644466 ¹	2–14 32–44	640605	2–24 32–54	644470 ¹	2–14 32–44
22 AWG 0.3–0.4 mm ²	640601	2–24 32–54	644467 ¹	2–14 32–44	640606	2–24 32–54	644471 ¹	2–14 32–44
24 AWG 0.2 mm ²	640602	2–24 32–54	644468 ¹	2–14 32–44	640607	2–24 32–54	644472 ¹	2–14 32–44
26 AWG 0.12–0.15 mm ²	640595	2–24 32–54	—	—	640608	2–24 32–54	—	—
Tape Mounted on Reel UL94V-2, Tin Plated								
18 AWG 0.8–0.9 mm ²	641302	2–24 32–54	—	—	641306	2–24 32–54	—	—
20 AWG 0.5–0.6 mm ²	641303	2–24 32–54	—	—	641307	2–24 32–54	—	—
22 AWG 0.3–0.4 mm ²	641304	2–24 32–54	—	—	641308	2–24 32–54	—	—
24 AWG 0.2 mm ²	641305	2–24 32–54	—	—	641309	2–24 32–54	—	—
26 AWG 0.12–0.15 mm ²	641301	2–24 32–54	—	—	641310	2–24 32–54	—	—
Standard UL94V-2, .00003 [.00076] Gold Plated								
18 AWG 0.8–0.9 mm ²	641227	2–24 32–54	644718 ¹	2–14 32–44	641232	2–24 32–54	—	—
20 AWG 0.5–0.6 mm ²	641228	2–24 32–54	—	—	641233	2–24 32–54	—	—
22 AWG 0.3–0.4 mm ²	641229	2–24 32–54	644720 ¹	2–14 32–44	641234	2–24 32–54	—	—
24 AWG 0.2 mm ²	641230	2–24 32–54	—	—	641235	2–24 32–54	—	—
26 AWG 0.12–0.15 mm ²	641231	2–24 32–54	—	—	641236	2–24 32–54	—	—
Standard UL94V-2, .000015 [.00038] Gold Plated								
18 AWG 0.8–0.9 mm ²	641168	2–24 32–54	647479 ¹	2–12 32–42	641173	2–24 32–54	—	—
20 AWG 0.5–0.6 mm ²	641169	2–24 32–54	—	—	641174	2–24 32–54	—	—
22 AWG 0.3–0.4 mm ²	641170	2–24 32–54	647496 ¹	2–12 32–42	641175	2–24 32–54	—	—
24 AWG 0.2 mm ²	641171	2–24 32–54	—	—	641176	2–24 32–54	—	—
26 AWG 0.12–0.15 mm ²	641172	2–24 32–54	—	—	641177	2–24 32–54	—	—
Standard UL94V-0, Tin Plated								
18 AWG 0.8–0.9 mm ²	—	—	—	—	644567 ¹	2–12 32–42	644570 ¹	2–12 32–42
22 AWG 0.3–0.4 mm ²	—	—	—	—	644569 ¹	2–12 32–42	644572 ¹	2–12 32–42

¹ Other circuit sizes are available upon request. Minimums may apply.

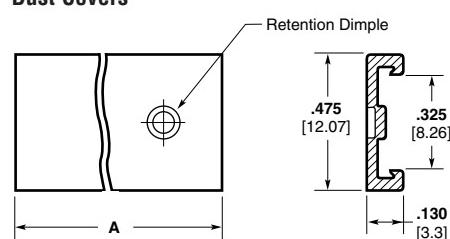
Note: Blocked circuit configurations are available upon request. Contact product engineer or product manager for details. Minimums may apply.

Closed End Covers**Material (RoHS Compliant)****Strain Relief Covers**—UL94V-2 rated, nylon, white**Dust Covers**—UL94V-0 rated, polyester, white**Strain Relief Covers**

Note: This portion of front locking bar may or may not be present

Dust Covers**Feed-Thru Covers****Material (RoHS Compliant)****Strain Relief Covers**—UL94V-2 rated, nylon, white**Dust Covers**—UL94V-0 rated, polyester, white**Strain Relief Covers**

Note: This portion of front locking bar may or may not be present

Dust Covers**Cover Ordering Information**

The "Base Part Numbers" Chart at right shows the base part number and number of circuits available for the described cover.

Prefixes and suffixes are determined by the number of circuit positions in the cover. For example, the complete part number for a 10-position closed-end strain relief cover would be:

Base number **643067** plus prefix-and-suffix

1- — -0

The correct ordering number is

1-643067-0

Cover Length

No. of Circuits	Dim. A	Prefix/Suffix	No. of Circuits	Dim. A	Prefix/Suffix	No. of Circuits	Dim. A	Prefix/Suffix
2	.312 7.92	-2	10	1.560 39.62	1- -0	18	2.808 71.32	1- -8
3	.468 11.89	-3	11	1.716 43.59	1- -1	19	2.964 75.29	1- -9
4	.624 15.85	-4	12	1.872 47.55	1- -2	20	3.120 79.25	2- -0
5	.780 19.81	-5	13	2.028 51.51	1- -3	21	3.276 83.21	2- -1
6	.936 23.77	-6	14	2.184 55.47	1- -4	22	3.432 87.17	2- -2
7	1.092 27.74	-7	15	2.340 59.44	1- -5	23	3.588 91.14	2- -3
8	1.248 31.7	-8	16	2.496 63.4	1- -6	24	3.744 95.1	2- -4
9	1.404 35.66	-9	17	2.652 67.36	1- -7			

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

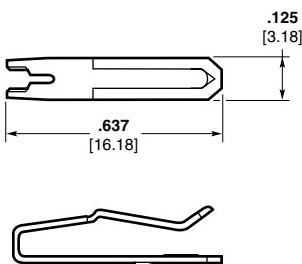
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Replacement IDC Contacts**Material and Finish**

Contacts—Phosphor bronze, post tin plated; .000030 [0.00076] or .000015 [0.00038] post gold plated over nickel

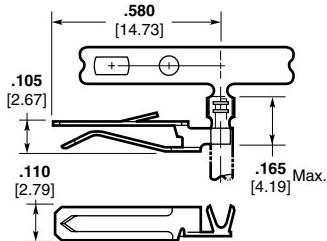
Note: Tyco Electronics does not recommend terminating an MTA contact more than one time. Use replacement contacts when required for field repairs or wire changes.



Wire Size AWG	mm ²	Part Numbers		
		Tin Plated .000030 [0.00076]	Gold Plated .000015 [0.00038]	Gold Plated
18	0.8–0.9	640631-3	641143-4	641143-3
20	0.5–0.6	640632-3	641144-4	641144-3
22	0.3–0.4	640633-3	641145-4	641145-3
24	0.2	640634-3	641146-4	641146-3
26	0.12–0.15	640635-3	641147-4	641147-3

Crimp Snap-in Contacts**Material and Finish**

Contacts—Phosphor bronze, tin plated



Wire Size AWG	mm ²	Part Nos.	
		Loose Piece*	Strip**
26–22	.12–0.3	640557-3	640556-3
22–18	0.3–0.9	640559-3	640558-3

*Hand Tool No. 59837-1 (408-6528)

**AMP-O-LECTRIC Model "G" Termination Machine (Request Catalog 65828)

Note: Requires applicator. For part number, call Technical Support.

Special applications for crimp snap-in contacts are:

1. Double wire per contact
2. Coax or shielded wire
3. Mixed wire size in same connector

Note: Only one crimp snap-in contact per connector.

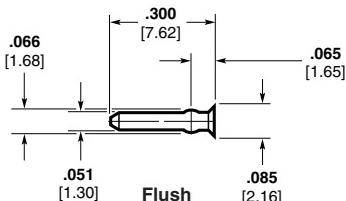
Keying Plugs**Material (RoHS Compliant)**

UL94V-2 rated, nylon, natural color

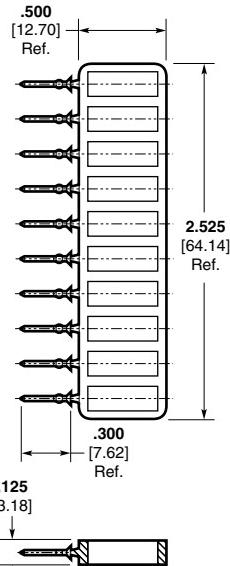
Note: Removal of contact is not necessary when using keying plug.

MTA-156
.156 [3.96]**Loose Piece****Part No. 640629-1 (Flush)**

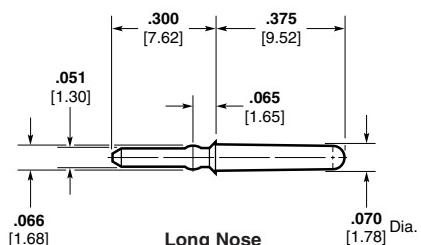
Used with keyed headers

**On Carrier Strip****Part No. 641623-1 (Flush)**

(10 per strip)

**Part No. 640630-1 (Long Nose)**

Used with staked post

**Panel Mount End Caps****Part No. 641440-1****Part No. 641533-1**

(2-position only)

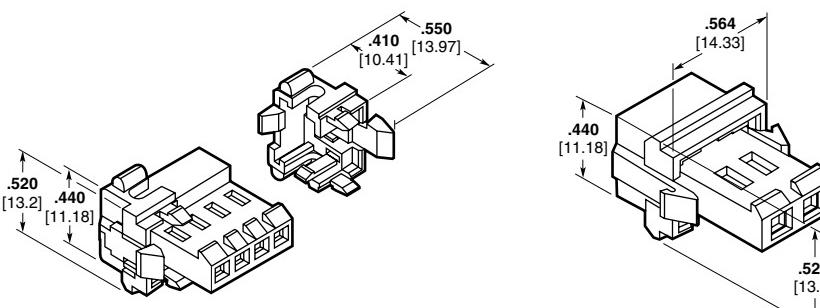
Material (RoHS Compliant)

UL94V-2 rated, nylon, black

Notes:

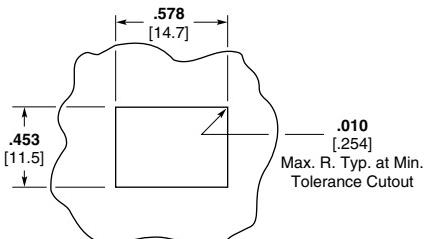
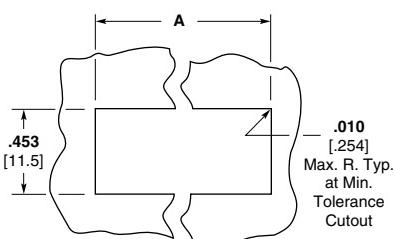
- Both left-hand and right-hand end caps are attached by a connecting tab. This tab must be broken off prior to installing on connector.
- For best results attach panel mount end caps to the MTA-156 (IDC) connectors shown on pages 36 thru 39. While not preferred, panel mount end caps can be attached to MTA-156 (IDC) posted connector on page 45.

No. of Pos.	Dim. A
3	.736 18.69
4	.892 22.66
6	1.204 30.58
9	1.672 42.47
12	2.140 54.36
15	2.608 66.24
24	4.012 101.9



3- thru 24-Position
641440-1
See Note 1

Two-Position Only
641533-1



Recommended Panel Cutout
(Recommended Panel Thickness .062 [1.57] to .067 [1.70] max.)



Electronics

MTA-156 Posted Connector/Connector Mateability Guide

Matrix for Tin Plated Part Numbers

This matrix has been prepared to assist you, our customer, in defining the correct mating halves for the MTA-156 posted connector and connector combination. Where a "Y" is indicated the combination is a valid mating pair. Where an "N" is indicated the combination is not acceptable for mating.

Connectors

Posted Connectors

Catalog 82056
Revised 4-05
www.tycelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

**South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967**

**Matrix for .000030
[0.00076] Gold Plated
Part Numbers****Connectors**

	644807	644809	644812	644814
641217	Y	Y	Y	Y
641218	Y	Y	Y	Y
641219	Y	Y	Y	Y
641220	Y	Y	Y	Y
641221	Y	Y	Y	Y
641222	N	N	N	N
641223	N	N	N	N
641224	N	N	N	N
641225	N	N	N	N
641226	N	N	N	N
641227	Y	Y	Y	Y
641228	Y	Y	Y	Y
641229	Y	Y	Y	Y
641230	Y	Y	Y	Y
641231	Y	Y	Y	Y
641232	N	N	N	N
641233	N	N	N	N
641234	N	N	N	N
641235	N	N	N	N
641236	N	N	N	N
644460	N	N	N	N
644662	N	N	N	N
644663	N	N	N	N
644687	N	N	N	N
644718	N	N	N	N
644720	N	N	N	N

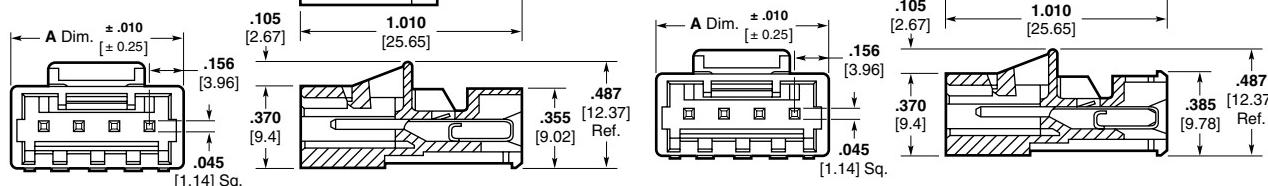
**Matrix for .000015
[0.00038] Gold Plated
Part Numbers****Connectors**

	643995	647476	647481	647497
641148	Y	Y	Y	Y
641149	Y	Y	Y	Y
641150	Y	Y	Y	Y
641151	Y	Y	Y	Y
641152	Y	Y	Y	Y
641153	N	N	N	N
641154	N	N	N	N
641155	N	N	N	N
641156	N	N	N	N
641157	N	N	N	N
641168	Y	Y	Y	Y
641169	Y	Y	Y	Y
641170	Y	Y	Y	Y
641171	Y	Y	Y	Y
641172	Y	Y	Y	Y
641173	N	N	N	N
641174	N	N	N	N
641175	N	N	N	N
641176	N	N	N	N
641177	N	N	N	N
644284	N	N	N	N
647478	N	N	N	N
647479	N	N	N	N
647496	N	N	N	N

Material and Finish

Housing — UL 94V-2 rated, nylon, see chart for color

Contacts — Copper alloy, post tin or .000030 [.00076] gold plated over nickel

**Notes:**

1. Mating half visuals - pages 36 thru 39.
2. Strain relief & dust covers - pages 40 & 41.
3. Approved wire listing - page 70.

Connector Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and number of circuits available for the described connectors.

Prefixes and suffixes are determined by the number of circuit positions in the connector. For example, the complete part number for a 12-position closed end connector for 18 AWG wire would be:

Base number **641435** plus prefix-and-suffix

1- -2

The correct ordering number is
1-641435-2

See page 15 for an explanation of RoHS lead free equivalents.

Note: All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

Color Coding by Wire Size for UL 94V-2 Connectors

18 AWG — Orange

20 AWG — Yellow

22 AWG — Red

24 AWG — White

26 AWG — Blue

Performance Data

Voltage Rating — 600 VAC

Current Rating — 7 amp max.

Low-Level Resistance —

7 mΩ max. initial

Dielectric Withstanding Voltage —

1500 VAC/1 min.

Insulation Resistance —

5000 MΩ min. initial

Operating Temperature —

-55°C to +105°C

Closed End**Feed-Thru****Base Part Numbers**

Connector Type & Wire Size	Closed End Connector ¹		Feed-Thru Connector ¹	
	Part Nos.	No. of Circuits/ RoHS Equiv.	Part Nos.	No. of Circuits/ RoHS Equiv.
Standard UL 94V-2, Tin Plated				
18 AWG 0.8-0.9 mm ²	641435	2, 3, 4, 6, 9, 12, 15, 24 32, 33, 34, 36, 39, 42, 45, 54	641522	2, 3, 4, 6, 9, 12, 15, 24 32, 33, 34, 36, 39, 42, 45, 54
20 AWG 0.5-0.6 mm ²	641436	2, 3, 4, 6, 9, 12, 15, 24 32, 33, 34, 36, 39, 42, 45, 54	641523	2, 3, 4, 6, 9, 12, 15, 24 32, 33, 34, 36, 39, 42, 45, 54
22 AWG 0.3-0.4 mm ²	641437	2, 3, 4, 6, 9, 12, 15, 24 32, 33, 34, 36, 39, 42, 45, 54	641524	2, 3, 4, 6, 9, 12, 15, 24 32, 33, 34, 36, 39, 42, 45, 54
24 AWG 0.2 mm ²	641438	2, 3, 4, 6, 9, 12, 15, 24 32, 33, 34, 36, 39, 42, 45, 54	641525	2, 3, 4, 6, 9, 12, 15, 24 32, 33, 34, 36, 39, 42, 45, 54
26 AWG 0.12-0.15 mm ²	641439	2, 3, 4, 6, 9, 12, 15, 24 32, 33, 34, 36, 39, 42, 45, 54	641526	2, 3, 4, 6, 9, 12, 15, 24 32, 33, 34, 36, 39, 42, 45, 54
Standard UL 94V-2, .000030 [.000076] Gold Plated				
18 AWG 0.8-0.9 mm ²	644807	2, 3, 4, 6, 9, 12, 15, 24 32, 33, 34, 36, 39, 42, 45, 54	644812	2, 3, 4, 6, 9, 12, 15, 24 32, 33, 34, 36, 39, 42, 45, 54
20 AWG 0.5-0.6 mm ²	— ²	—	— ²	—
22 AWG 0.3-0.4 mm ²	644809	2, 3, 4, 6, 9, 12, 15, 24 32, 33, 34, 36, 39, 42, 45, 54	644814	2, 3, 4, 6, 9, 12, 15, 24 32, 33, 34, 36, 39, 42, 45, 54
24 AWG 0.2 mm ²	— ²	—	— ²	—
26 AWG 0.12-0.15 mm ²	— ²	—	— ²	—
Standard UL 94V-2, .000015 [.000038] Gold Plated				
18 AWG 0.8-0.9 mm ²	647476	2, 3, 4, 6, 9, 12, 15, 24 32, 33, 34, 36, 39, 42, 45, 54	647481	2, 3, 4, 6, 9, 12, 15, 24 32, 33, 34, 36, 39, 42, 45, 54
22 AWG 0.3-0.4 mm ²	643995	2, 3, 4, 6, 9, 12, 15, 24 32, 33, 34, 36, 39, 42, 45, 54	647497	2, 3, 4, 6, 9, 12, 15, 24 32, 33, 34, 36, 39, 42, 45, 54

¹ MTA-156 Posted Connectors (Closed End and Feed-Thru) will Only mate with MTA-156 connectors with locking ramp and without polarizing tabs. They will NOT mate with MTA-156 Quad Connectors.

² Parts can be made available upon request. Minimums may apply.

No. of Circuits	Dim.		No. of Circuits	Dim.		Prefix/Suffix
	A	B		Suffix		
2	.468 11.89	.316 8.03	-2	9	1.560 39.62	1.408 35.76
3	.624 15.85	.472 11.99	-3	12	2.028 51.51	1.876 47.65
4	.780 19.81	.628 15.95	-4	15	2.496 63.40	2.344 59.54
6	1.092 27.74	.940 23.88	-6	24	3.900 99.06	3.748 95.20

Technical Documents**Product Specification**

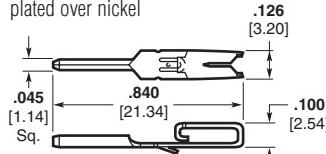
108-1065 MTA-156 Posted Connector

Application Specification

114-1020 MTA-156 Connectors, Posted Connectors and Card Edge Connectors

Replacement IDC Contacts**Material and Finish**

Contacts — Copper alloy, post tin plated over nickel



Wire Size	Part Number
AWG	mm ²
18	0.8-0.9
20	0.5-0.6
22	0.3-0.4
24	0.2
26	0.12-0.15

Material and Finish

Housing — UL94V-0 rated, polyester, white

Posts — Copper alloy, tin plated, .000030 [0.00076] or .000015 [0.00038] gold over nickel

Notes:

- Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
- Gold headers are duplex plated, gold on mating end of post and tin on the solder tail.
- .125 [3.18] solder tail lengths are for .062 [1.57] thick printed circuit boards and .175 [4.45] solder tail lengths are for .093-.125 [2.36-3.18] thick printed circuit boards.
- To determine header overall length (Dim. A), multiply .156 x the number of posts. Example: .156 x 10 posts equals 1.560 inches [39.62 mm].

For mateability options, see matrix on pages 34, 35, 54 and 58.

For mating half visuals, see pages 36 thru 39, 55, 60 and 62.

Header Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and number of posts available for the described headers.

Prefixes and suffixes are determined by the number of post positions in the header. For example, the complete part number for a 10-position header with square posts and a .125 [3.18] solder tail length would be:

Base number **640383** plus prefix-and-suffix
1- — 0

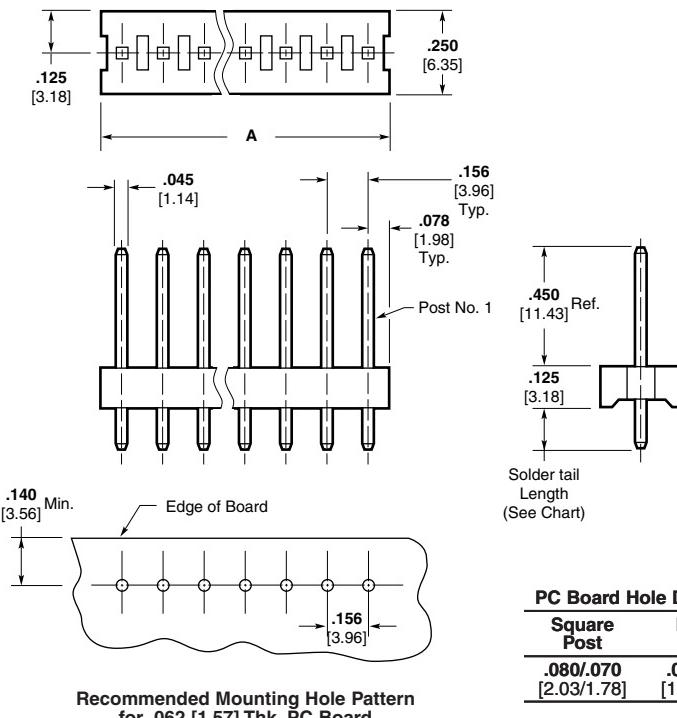
The correct ordering number is
1-640383-0

The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	640383-2	3-640383-2
24	2-640383-4	5-640383-4

See page 15 for an explanation of RoHS lead free equivalents.

Note: All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

**PC Board Hole Diameters**

Square Post	Round Post
.080/.070 [2.03/1.78]	.070/.060 [1.78/1.52]

Note: Consult Product Drawing for details on placing headers onto PC boards.

Base Part Numbers

Square Posts				Round Posts			
.125 [3.18] Solder tail		.175 [4.45] Solder tail		.125 [3.18] Solder tail		.175 [4.45] Solder tail	
Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.
Standard UL94V-0, Tin Plated							
640383	2-24	644749	2-24	640384	2-24	644750	2-24
Standard UL94V-0, .000030 [0.00076] Gold Plated							
641202	2-24 32-54	644756	2-24 32-54	641203	2-24 32-54	644757	2-24 32-54
Standard UL94V-0, .000015 [0.00038] Gold Plated							
641113	2-24 32-54	644763	2-24 32-54	641114	2-24 32-54	644764	2-24 32-54

Note:

Select load headers (omitted pin headers) are available upon request. Please contact product engineer or product manager for details.

Material and Finish

Housing — UL94V-0 rated, polyester, white

Posts — Copper alloy, tin plated, .000030 [0.00076] or .000015 [0.00038] gold over nickel

Notes:

- Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
- Gold headers are duplex plated, gold on mating end of post and tin on the solder tail.
- .125 [3.18] solder tail lengths are for .062 [1.57] thick printed circuit boards and .175 [4.45] solder tail lengths are for .093-.125 [2.36-3.18] thick printed circuit boards.
- To determine header overall length (Dim. A), multiply .156 x the number of posts. Example: .156 x 10 posts equals 1.560 inches [39.62 mm].

For mateability options, see matrix on pages 34, 35, 54 and 58.

For mating half visuals, see pages 36 thru 39, 55, 60 and 62.

Header Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and number of posts available for the described headers.

Prefixes and suffixes are determined by the number of post positions in the header. For example, the complete part number for a 10-position header with square posts and a .125 [3.18] solder tail length would be:

Base number **641204** plus prefix-and-suffix
1- — 0

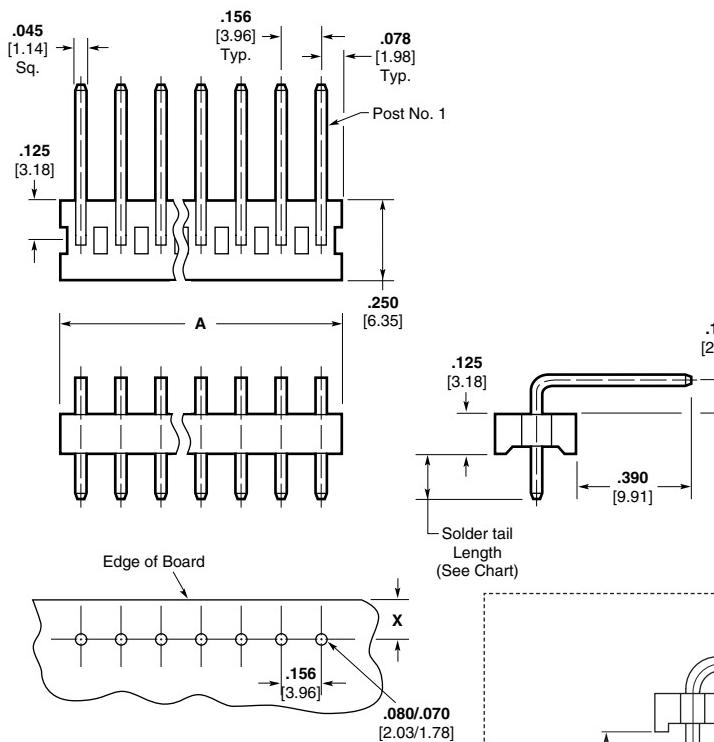
The correct ordering number is
1-641204-0

The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	641204-2	3-641204-2
	thru	

See page 15 for an explanation of RoHS lead free equivalents.

Note: All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

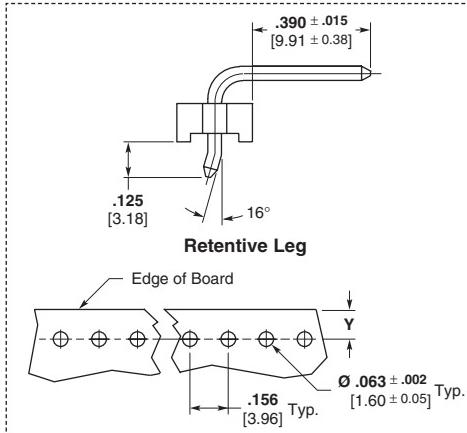
MTA-156 Flat Headers—Right-Angle

Recommended Mounting Hole Pattern for .062 [1.57] Thk. PC Board

X = .140 [3.56] Min., .430 [10.92] Max. when mated with MTA Connector.

X = .140 [3.56] Min. when mated with SL-156 Wire-to-Board Connector.

Note: Consult Product Drawing for details on placing headers onto PC boards.



Recommended Mounting Hole Pattern for .063 [1.60] Thk. PC Board for Retentive Leg Header

Y = .140 [3.56] Min., .430 [10.92] Max. when mated with MTA Connector.

Base Part Numbers

Retentive Leg		Square Posts		.125 [3.18] Solder tail		.175 [4.45] Solder tail	
Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.
Standard UL94V-0, Tin Plated							
647646	2-12	640385	2-24	644751	2-24		
Standard UL94V-0, .000030 [0.00076] Gold Plated							
—	—	641204	2-24 32-54	644758	2-24 32-54		
Standard UL94V-0, .000015 [0.00038] Gold Plated							
—	—	641115	2-24 32-54	644765	2-24 32-54		

Note:

Select load headers (omitted pin headers) are available upon request. Please contact product engineer or product manager for details.

MTA-156 Friction Lock Headers—Straight

Material and Finish

Housing — UL94V-0 rated, polyester, white

Posts — Copper alloy, tin plated, .000030 [0.00076] or .000015 [0.00038] gold over nickel

Notes:

- Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
- Gold headers are duplex plated, gold on mating end of post and tin on the solder tail.
- .125 [3.18] solder tail lengths are for .062 [1.57] thick printed circuit boards and .175 [4.45] solder tail lengths are for .093-.125 [2.36-3.18] thick printed circuit boards.
- To determine header overall length (Dim. A), multiply .156 x the number of posts. Example: .156 x 10 posts equals 1.560 inches [39.62 mm].

For mateability options, see matrix on pages 34, 35, 54 and 58.

For mating half visuals, use connectors with a locking ramp for polarization/retention purposes, see pages 36 thru 39, 55, 60 and 62.

For polarizing purposes only use connectors without a locking ramp. See pages 36 thru 39, 55, 60 and 62.

Header Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and number of posts available for the described headers.

Prefixes and suffixes are determined by the number of post positions in the header. For example, the complete part number for a 10-position header with square posts and a .125 [3.18] solder tail length would be:

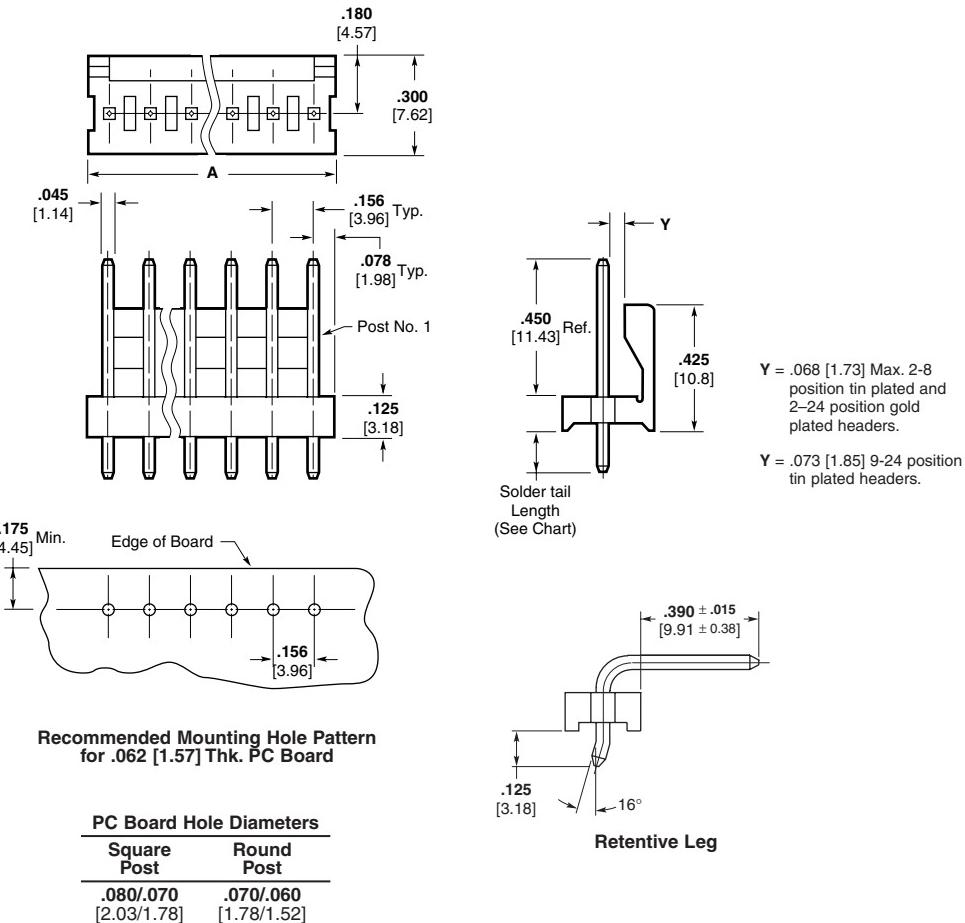
Base number **641208** plus prefix-and-suffix
1- -0

The correct ordering number is
1-641208-0

The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	641208-2	3-641208-2
	thru	

See page 15 for an explanation of RoHS lead free equivalents.



Note: Consult Product Drawing for details on placing headers onto PC boards.

Base Part Numbers

Square Posts				Round Posts			
Retentive Leg		.125 [3.18] Solder tail	.175 [4.45] Solder tail	.125 [3.18] Solder tail		.175 [4.45] Solder tail	
Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.
Standard UL94V-0, Tin Plated							
1744017	2-12	640445	2-24	644752	2-24	640388	2-24
Standard UL94V-0, .000030 [0.00076] Gold Plated							
—	—	641208	2-24 32-54	644759	2-24 32-54	641209	2-24 32-54
Standard UL94V-0, .000015 [0.00038] Gold Plated							
—	—	641119	2-24 32-54	644766	2-24 32-54	641120	2-24 32-54

Note: All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

Note:
Select load headers (omitted pin headers) and tube loaded product are available upon request. Please contact product engineer or product manager for details.

Material and Finish

Housing — UL94V-0 rated, polyester, white

Posts — Copper alloy, tin plated, .000030 [0.00076] or .000015 [0.00038] gold over nickel

Notes:

- Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
- Gold headers are duplex plated, gold on mating end of post and tin on the solder tail.
- .125 [3.18] solder tail lengths are for .062 [1.57] thick printed circuit boards and .175 [4.45] solder tail lengths are for .093-.125 [2.36-3.18] thick printed circuit boards.
- To determine header overall length (Dim. A), multiply .156 x the number of posts. Example: .156 x 10 posts equals 1.560 inches [39.62 mm].

For mateability options, see matrix on pages 34, 35, 54 and 58.

When using Front Bend Headers — for mating half visuals use connectors with a locking ramp for polarization/retention purposes. When using Rear Bend Headers — for mating half visuals use connectors without a locking ramp. For polarization purposes only see pages 36 thru 39, 55, 60 and 62.

Header Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and number of posts available for the described headers.

Prefixes and suffixes are determined by the number of post positions in the header. For example, the complete part number for a 10-position header with square posts, front bend, and a .125 [3.18] solder tail length would be:

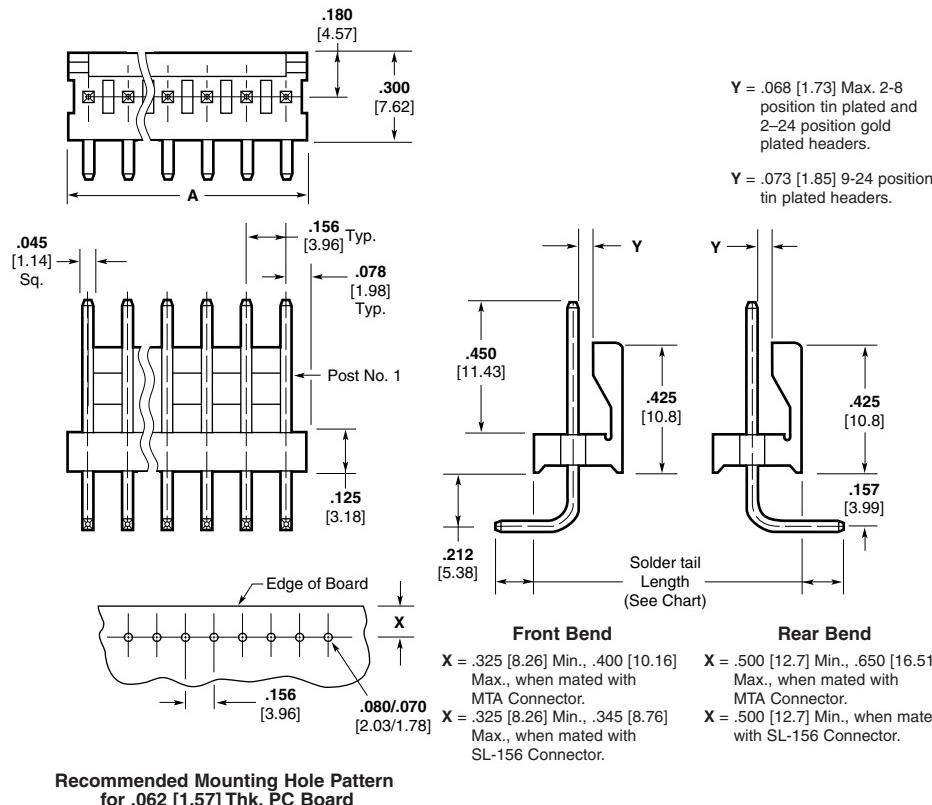
Base number **641210** plus prefix-and-suffix
1 — 0

The correct ordering number is
1-641210-0

The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	641210-2	3-641210-2
24	2-641210-4	5-641210-4

See page 15 for an explanation of RoHS lead free equivalents.

MTA-156 Friction Lock Headers—Right-Angle

Recommended Mounting Hole Pattern
for .062 [1.57] Thk. PC Board

Note: Consult Product Drawing for details on placing headers onto PC boards.

Base Part Numbers**Square Posts**

Front Bend				Rear Bend			
.125 [3.18] Solder tail	.175 [4.45] Solder tail	.125 [3.18] Solder tail	.175 [4.45] Solder tail				
Header No. of Posts/ Part Nos. RoHS Equiv.	Header No. of Posts/ Part Nos. RoHS Equiv.	Header No. of Posts/ Part Nos. RoHS Equiv.	Header No. of Posts/ Part Nos. RoHS Equiv.				
Standard UL94V-0, Tin Plated							
640389	2-24	644754	2-24	640387	2-24	644755	2-24
Standard UL94V-0, .000030 [0.00076] Gold Plated							
641210	2-24 32-54	644761	2-24 32-54	641207	2-24 32-54	644762	2-24 32-54
Standard UL94V-0, .000015 [0.00038] Gold Plated							
641121	2-24 32-54	644768	2-24 32-54	641118	2-24 32-54	644769	2-24 32-54

Note: All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

Note: Select load headers (omitted pin headers) are available upon request. Please contact product engineer or product manager for details.

Material and Finish

Housing — UL94V-0 rated, polyester, white

Posts — Copper alloy, tin plated or .000030 [0.00076] gold over nickel

Notes:

- Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
- Peg holes are not required in PC Boards when headers without pegs are used.
- One peg only on a 2 position header, other position sizes have two pegs.
- Headers with .00015 [0.00038] gold plated post are available upon request. Minimums may apply.
- To determine header overall length (Dim. A), multiply .156 x the number of posts. Example: .156 x 10 posts equals 1.560 inches [39.62 mm].

For mateability options, see matrix on pages 34, 35, 54 and 58.

For mating half visuals, use connectors with a locking ramp for polarization/retention purposes, see pages 36 thru 39, 55, 60 and 62.

For polarizing purposes only use connectors without a locking ramp. See pages 36 thru 39, 60 and 62.

Header Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and number of posts available for the described headers.

Prefixes and suffixes are determined by the number of post positions in the header. For example, the complete part number for a 10-position header with square posts with pegs would be:

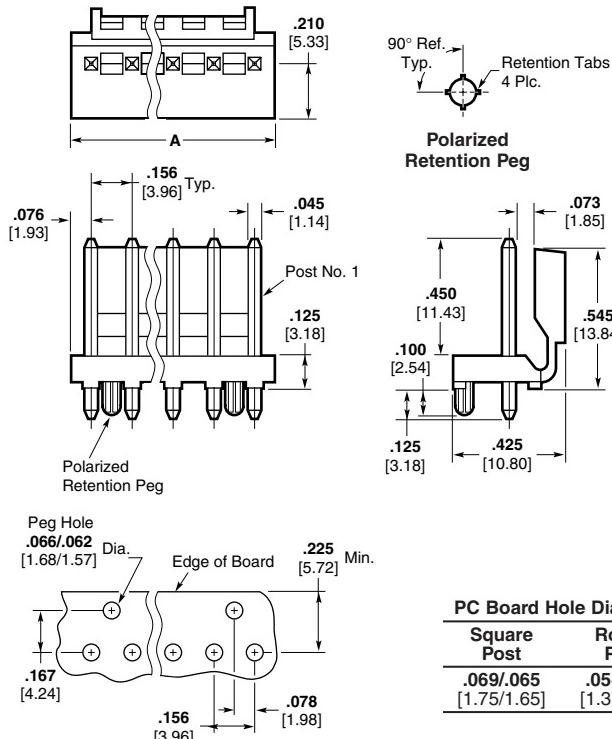
Base number **644615** plus prefix-and-suffix **1- — -0**

The correct ordering number is
1-644615-0

The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	644615-2	3-644615-2
	thru	
18	1-644615-8	4-644615-8

See page 15 for an explanation of RoHS lead free equivalents.

MTA-156 Polarized Lock Headers—Straight

Recommended Mounting Hole Pattern for .062 [1.57] Thk. PC Board

PC Board Hole Diameters

Square Post	Round Post
.069/.065 [1.75/1.65]	.054/.050 [1.37/1.27]

Note: Consult Product Drawing for details on placing headers onto PC boards.

Base Part Numbers

Square Posts		Round Posts	
Without Pegs	With Pegs	Without Pegs	With Pegs
Header No. of Posts/ Part Nos.	RoHS Equiv.	Header No. of Posts/ Part Nos.	RoHS Equiv.
Standard UL94V-0, Tin Plated			
644611	2-18 32-48	644615	2-18 32-48
		644612	2-18 32-48
Standard UL94V-0, .000030 [0.00076] Gold Plated			
644627	2-18 32-48	644631	2-18 32-48
		644628	2-18 32-48
		644632	2-18 32-48

Note: All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

Note: Select load headers (omitted pin headers) are available upon request. Please contact product engineer or product manager for details.

Material and Finish

Housing — UL94V-0 rated, polyester, white

Posts — Copper alloy, tin plated or .000030 [0.00076] gold over nickel

Notes:

- Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
- Peg holes are not required in PC Boards when headers without pegs are used.
- One peg only on a 2 position header, other position sizes have two pegs.
- Headers with .00015 [0.00038] gold plated post are available upon request. Minimums may apply.
- To determine header overall length (Dim. A), multiply .156 x the number of posts. Example: .156 x 10 posts equals 1.560 inches [39.62 mm].

For mateability options, see matrix on pages 34, 35, 54 and 58.

For mating half visuals, use only connectors with a locking ramp for polarization/retention purposes, see pages 36 thru 39, 55, 60 and 62.

For polarizing purposes only use connectors without a locking ramp. See pages 36 thru 39, 60 and 62.

Header Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and number of posts available for the described headers.

Prefixes and suffixes are determined by the number of post positions in the header. For example, the complete part number for a 10-position header with front bend and with pegs would be:

Base number **644617** plus prefix-and-suffix

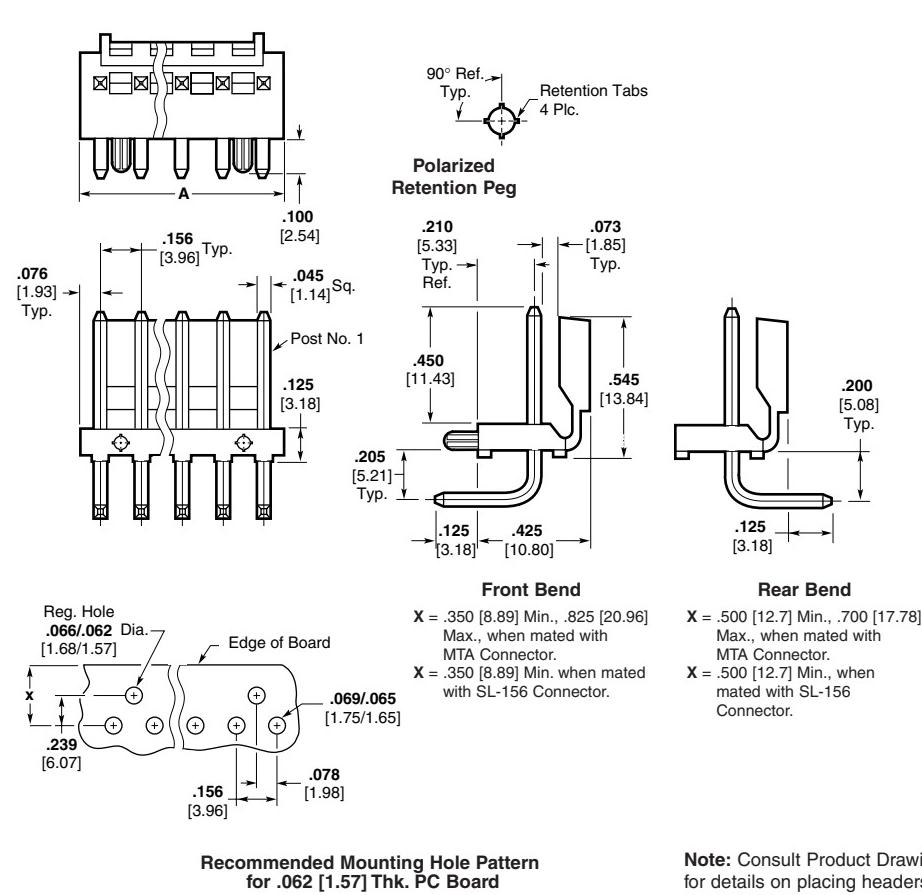
1- --- 0

The correct ordering number is
1-644617-0

The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

No. of Posts	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	644617-2	3-644617-2
thru		
18	1-644617-8	4-644617-8

See page 15 for an explanation of RoHS lead free equivalents.

MTA-156 Polarized Lock Headers—Right-Angle

Note: Consult Product Drawing for details on placing headers onto PC boards.

MTA-156
.156 [3.96]

Base Part Numbers

Square Posts					
Front Bend		With Pegs		Rear Bend	
Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.
Standard UL94V-0, Tin Plated					
644613	2-18 32-48	644617	2-18 32-48	644614	2-18 32-48
Standard UL94V-0, .000030 [0.00076] Gold Plated					
644629	2-18 32-48	644633	2-18 32-48	644630	2-18 32-48

Note: All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

Note: Select load headers (omitted pin headers) are available upon request. Please contact product engineer or product manager for details.

Material and Finish

Housing—UL94V-0 rated, nylon, black

Posts—Copper alloy, tin plated, .000015 [0.00038] gold over nickel

Notes:

- Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
- Gold headers are duplex plated, gold on mating end of post and tin-lead on the solder tail.
- Headers with straight and right-angle square posts are available upon request. Minimums may apply.
- To determine header overall length (Dim. A), multiply .156 x the number of posts. Example: .156 x 10 posts equals 1.560 inches [39.62 mm].

For mateability options, see matrix on pages 34, 35, 54 and 58.

For mating half visuals, use connectors with a locking ramp for polarization/retention purposes, see pages 36 thru 39, 55, 60 and 62.

For polarizing purposes only use connectors without a locking ramp. See pages 36 thru 39, 60 and 62.

Header Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and number of posts available for the described headers.

Prefixes and suffixes are determined by the number of post positions in the header. For example, the complete part number for a 10-position header with round tin plated posts:

Base number **647648** plus prefix-and-suffix
1- — -0

The correct ordering number is

1-647648-0

The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

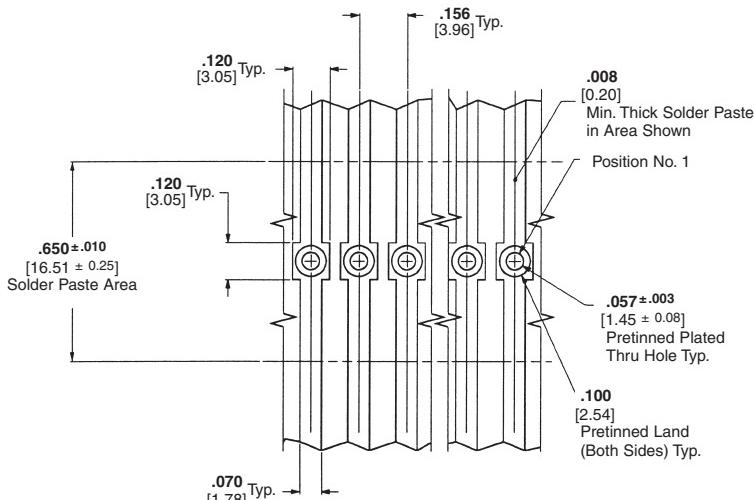
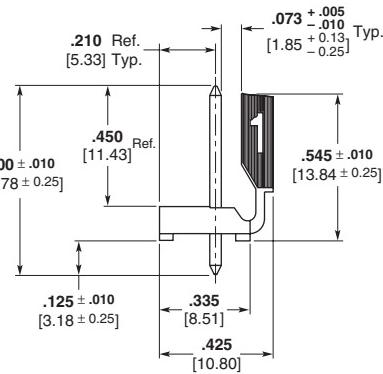
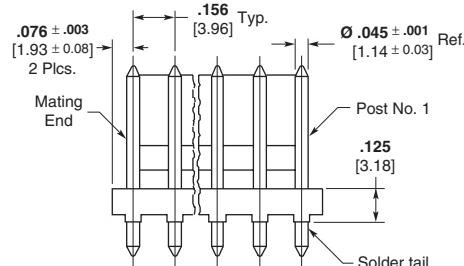
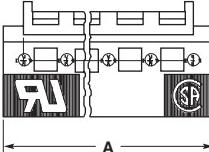
No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	647648-2	3-647648-2
	thru	
12	1-647648-2	4-647648-2

See page 15 for an explanation of RoHS lead free equivalents.

Note: All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

MTA-156 Friction Lock High Temperature Headers—Straight**For use with Infrared Reflow Process**

Maximum Temperature Rating: 280°C



Recommended Mounting Hole Pattern for .062 [1.57] Thick PC Board

Note: Consult Product Drawing for details on placing headers onto PC boards.

Base Part Numbers

Header Part Nos.	Round Post	
	No. of Posts/	RoHS Equiv.
Standard UL94V-0, Tin Plated		
647648	2-12	32-42
Standard UL94V-0, .000015 [0.00038] Gold Plated		
647649	2-12	32-42

Note:

Select load headers (omitted pin headers) are available upon request. Please contact product engineer or product manager for details.

Material and Finish

Housing—UL94V-0 rated, polyester, black

Posts—Copper alloy, tin plated; or .000030 [0.00076] or .000015 [0.00038] gold over nickel

Notes:

- Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
- Gold headers are duplex plated, gold on mating end of post and tin on the solder tail.
- Peg holes are not required in PC boards when headers without pegs are used.
- One peg only on a 2 position header, other position sizes have two pegs.
- Right-angle front and rear bend headers with retention pegs can be made available upon request. Minimums may apply.

For mateability options, see matrix on pages 34, 35, 54 and 58.

For mating half visuals, see pages 36 thru 39 and 55.

Header Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and number of posts available for the described headers.

Prefixes and suffixes are determined by the number of post positions in the header. For example, the complete part number for a 10-position header with straight, square posts and with pegs would be:

Base number **647127** plus prefix-and-suffix
1- — 0

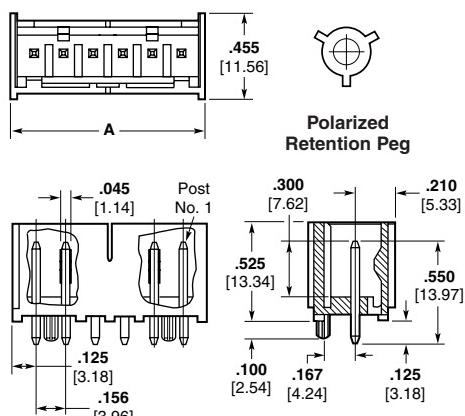
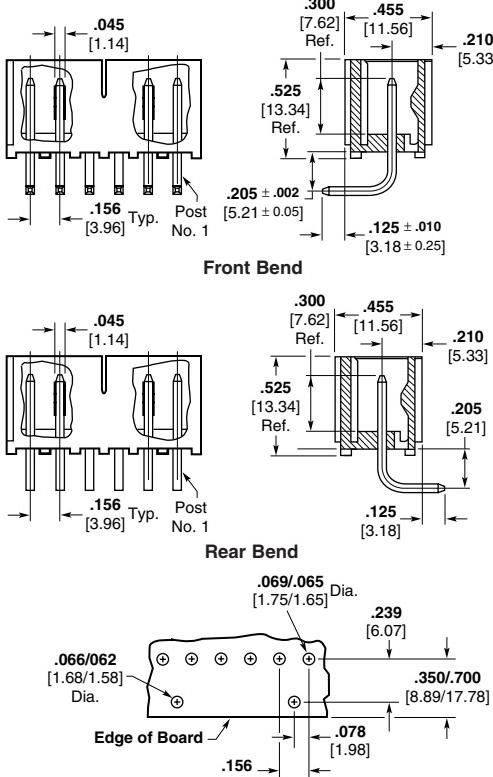
The correct ordering number is
1-647127-0

No. of Pos.	Dim. A	Standard Prefix/ Suffix	RoHS Prefix/ Suffix
2	.406 10.31	-2	2--2
3	.562 14.27	-3	2-3
4	.718 18.24	-4	2-4
5	.874 22.20	-5	2-5
6	1.030 26.16	-6	2-6
7	1.186 30.12	-7	2-7
8	1.342 34.09	-8	2-8
9	1.498 38.05	-9	2-9
10	1.654 42.01	1--0	3--0
11	1.810 45.97	1--1	3--1
12	1.966 49.94	1--2	3--2

Note: All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

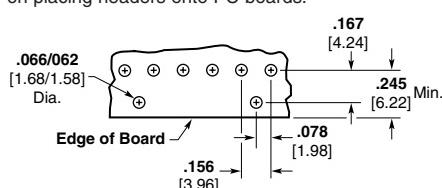
MTA, CST-100 II, SL-156 and AMP Economy Power (EP) Connectors

AMP

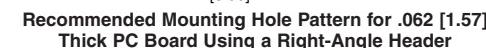
MTA-156 Shrouded Headers—Straight and Right-Angle**Straight Post (.045 [1.14] Square or Round)****Right-Angle (.045 [1.14] Square)****PC Board Hole Diameters**

Square Post	Round Post
.069/.065 [1.75/1.65]	.054/.050 [1.37/1.27]

Note: Consult Product Drawing for details on placing headers onto PC boards.



Recommended Mounting Hole Pattern for .062 [1.57] Thick PC Board Using a Straight Post Header



Recommended Mounting Hole Pattern for .062 [1.57] Thick PC Board Using a Right-Angle Header

Base Part Numbers

Straight Square Posts				Straight Round Posts				
Without Pegs		With Pegs		Without Pegs		With Pegs		
Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.	
Standard UL94V-0, Tin Plated								
647123	2-12 22-32	647127	2-12 22-32	647124	2-12 22-32	647128	2-12 22-32	
Standard UL94V-0, .000030 [0.00076] Gold Plated								
647131	2-12 22-32	647135	2-12 22-32	647132	2-12 22-32	647136	2-12 22-32	
Standard UL94V-0, .000015 [0.00038] Gold Plated								
647139	2-12 22-32	647143	2-12 22-32	647140	2-12 22-32	647144	2-12 22-32	
Square Posts								
Right-Angle Posts, Front Bend Without Pegs				Right-Angle Posts, Rear Bend Without Pegs				
Header Part Nos.		No. of Posts/ RoHS Equiv.		Header Part Nos.		No. of Posts/ RoHS Equiv.		
Standard UL94V-0, Tin Plated								
647125	2-12 22-32		647126	2-12 22-32		647128	2-12 22-32	
Standard UL94V-0, .000030 [0.00076] Gold Plated								
647133	2-12 22-32		647134	2-12 22-32		647136	2-12 22-32	
Standard UL94V-0, .000015 [0.00038] Gold Plated								
647141	2-12 22-32		647142	2-12 22-32		647144	2-12 22-32	

Note: Select load headers (omitted pin headers) are available upon request. Please contact product engineer or product manager for details.